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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 04/30/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/666,388

Applicant(s)

CHANTRAIN ET AL.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 1-9, 11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The preliminary amendment filed on 20 September 2000 is noted and made of record.
2. Claims 1 through 13 are presented for examination.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

4. The oath or declaration is defective because:
It does not identify the citizenship of each inventor.

Drawings

5. The drawings received on 20 September 2000 are accepted by the Examiner.
 6. The Patent and Trademark Office no longer makes drawing changes. See 1017 O.G. 4.
- It is applicant's responsibility to ensure that the drawings are corrected. Corrections must be made in accordance with the instructions below.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. **Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

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2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 through 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6,434,700 to Alonso et al., (hereinafter Alonso) in view of United States Patent No. 6,061,796 to Chen et al., (hereinafter Chen).

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9. As per claim 1, Alonso teaches a method for connecting a first user-terminal (UT1) to a second user-terminal (UT2) over a network such as the internet and the network containing a plurality of user-terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the method comprises the steps of:

a. at connection of the second user-terminal (UT2) to its respective network access server (NAS1) sending connection information by the respective network access server (NAS1) to a subscriber data server (SIDS) included in the network and coupled to each network access server (NAS1, NAS2, NAS3) (Figures 1 [blocks 106, 102, 104], 2 [blocks 106, 102, 104, 202, 204], 3 [blocks 300, 302, 304]; column 2, line 62 to column 3, line 10; column 6, lines 52-61; column 7, lines 16-59; column 8, line 65 to column 9, line 23);

b. updating a database of the subscriber data server (SIDS) with the connection information (Figure 2 [blocks 202, 204]; column 7, lines 16-59);

d. searching in the database of the subscriber data server (SDS) for connection information of the second user-terminal (UT2) (Figure 2 [blocks 202, 204]; column 7, lines 16-59); and,

e. the subscriber data server (SDS) determining the respective network access server (NAS1) connected to the second user terminal (UT2), using the connection information (Figures 1 [blocks 106, 102, 104], 2 [blocks 106, 102, 104, 202, 204], 3 [blocks 300, 302, 304]; column 2, line 62 to column 3, line 10; column 6, lines 52-61; column 7, lines 16-59; column 8, line 65 to column 9, line 23).

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10. Alonso does not teach:

c. handling by the subscriber data server (SDS) of an incoming call request from the first user-terminal (UT1) in order to establish a connection between the first user-terminal (UT1) and the second user terminal (UT2) the first user-terminal (UT1) being connected to a first virtual private network, the second user-terminal (UT2) being connected to a second virtual private network;

f. notifying the second user-terminal (UT2) about the requesting of the communication by the first user-terminal (UT1);

g. the second user-terminal (UT2) initiating and controlling a switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network;

h. the respective network access server (NAS1) of the second user-terminal (UT2) switching the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network; and

i. at switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network sending connection information by the respective network access server (NAS1) to the subscriber data server (SDS).

11. Chen teaches:

c. handling by the subscriber data server (SDS) of an incoming call request from the first user-terminal (UT1) in order to establish a connection between the first user-terminal (UT1) and the second user terminal (UT2) the first user-terminal (UT1) being connected to a first virtual private network, the second user-terminal (UT2) being connected to a second virtual private network (Figures 1A, 1B, 2 [blocks 20, 36, 37], 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49);

f. notifying the second user-terminal (UT2) about the requesting of the communication by the first user-terminal (UT1) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 8, lines 43-67; column 11, lines 23-49);

g. the second user-terminal (UT2) initiating and controlling a switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network (Figure 6 [blocks 20, 36, 37, 45, 62, 63]; column 11, lines 23-49);

h. the respective network access server (NAS1) of the second user-terminal (UT2) switching the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49); and

i. at switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network sending connection information by the respective network access server (NAS1) to the subscriber data server (SDS) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column

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8, lines 43-67; column 11, lines 23-49). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

12. Regarding claim 2, Alonso teaches characterized in that the step of notifying the second user-terminal (UT2) about the requesting of the communication by the first user-terminal (UT1) is performed according to the following steps of:

a. receiving the incoming call request of the subscriber data server (SDS) at the respective network access server (NAS1) connected to the second user-terminal (UT2) (Figures 1 [blocks 116], 2 [blocks 104, 116, 202, 205], 3 [block 300]; column 8, line 65 to column 9, line 32).

13. Alonso does not teach:

b. the respective network access server (NAS1) connected to the second user-terminal (UT2) sending the incoming call request of the first user-terminal (UT1) to the second user-terminal (UT2).

14. Chen teaches:

b. the respective network access server (NAS1) connected to the second user-terminal (UT2) sending the incoming call request of the first user-terminal (UT1) to the second user-terminal (UT2) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

15. Regarding claim 3, Alonso does not teach teaches characterized in that the step of notifying the second user-terminal (UT2) about the requesting of the communication by the first user-terminal (UT1) is performed over a transparent connection between the subscriber data server (SDS) and the second user-terminal (UT2) via the respective network access server (NAS1) connected to the second user-terminal (UT2).

16. Chen teaches characterized in that the step of notifying the second user-terminal (UT2) about the requesting of the communication by the first user-terminal (UT1) is performed over a transparent connection between the subscriber data server (SDS) and the second user-terminal (UT2) via the respective network access server (NAS1) connected to the second user-terminal (UT2) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20,

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36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

17. Regarding claim 4, Alonso teaches characterized in that the method further comprises before step c, the steps of:

- a. receiving the incoming call request of the first user-terminal (UT2) at the respective network access server (NAS2) connected to the first user-terminal (UT1) (Figures 1 [blocks 116], 2 [blocks 104, 116, 202, 205], 3 [block 300]; column 8, line 65 to column 9, line 32); and
- b. the respective network access server (NAS2) connected to the first user-terminal (UT1) sending the incoming call request of the first user-terminal (UT1) to the subscriber data server (SDS) (Figure 1 [blocks 104, 110], 2 [blocks 104, 202, 205], 3 [block 304]; column 6, line 62 to column 7, line 9; column 7, lines 25-33; column 9, lines 23-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to duplicate the network access server of Alonso for allowing multiple access to a plurality of users. See *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

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18. Regarding claim 5, Alonso teaches characterized in that the method further comprises before step c, the step of sending the incoming call request of the first user-terminal (UT1) over a transparent connection between the first user-terminal (UT1) and the subscriber data server (SDS) via the network access server (NAS2) connected to the first user-terminal (Figure 1 [blocks 104, 110], 2 [blocks 104, 202, 205], 3 [block 304]; column 6, line 62 to column 7, line 9; column 7, lines 25-33; column 9, lines 23-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to duplicate the network access server of Alonso for allowing multiple access to a plurality of users. See *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

19. Regarding claim 6, Alonso does not teach a Network Access Server (NAS1) for enabling a connection between a first user-terminal (UT1) and a second user-terminal (UT2) over a network such as the internet, the network containing a plurality of user-terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the network access server (NAS1) comprises:

a. switch notification reception means (SNRM), adapted to receive a request from the second user-terminal (UT2) to initiate a switch-over of a connection of the second user-terminal (UT2) from a second virtual private network to a first virtual private network;

b. switching means (SM), coupled with an input to an output of the switch notification reception means (SNRM) and adapted to perform the switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network; and

c. user-terminal connect notification sending means (HCNSM), coupled with an input to an output of the switching means (SM) and adapted to send connection information to the subscriber data server (SIDS) at connecting of the second user-terminal (UT2) to the respective network access server (NAS1) and at switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network.

20. Chen teaches a Network Access Server (NAS1) for enabling a connection between a first user-terminal (UT1) and a second user-terminal (UT2) over a network such as the internet, the network containing a plurality of user-terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the network access server (NAS1) comprises:

a. switch notification reception means (SNRM), adapted to receive a request from the second user-terminal (UT2) to initiate a switch-over of a connection of the second user-terminal (UT2) from a second virtual private network to a first virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 8, lines 43-67; column 11, lines 23-49);

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b. switching means (SM), coupled with an input to an output of the switch notification reception means (SNRM) and adapted to perform the switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 8, lines 43-67; column 11, lines 23-49); and

c. user-terminal connect notification sending means (HCNSM), coupled with an input to an output of the switching means (SM) and adapted to send connection information to the subscriber data server (SIDS) at connecting of the second user-terminal (UT2) to the respective network access server (NAS1) and at switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 8, lines 43-67; column 11, lines 23-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

21. With regards to claim 7, Alonso does not teach that the network access server (NAS1) further comprises:

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a. connection establishment request reception means (CERRM1), adapted to receive a connection request from the subscriber data server (SDS) to establish the connection between the first user-terminal (UT1) connected to the first virtual private network and the second user-terminal (UT2) connected to the second virtual private network via the respective network access server (NAS1); and

b. connection establishment request sending means (CERSM2), coupled with an input to an output of the connection establishment requesting reception means (CERRM1) and adapted to notify the second user-terminal (UT2) about an incoming call from the first user-terminal (UT1).

22. Chen teaches that the network access server (NAS1) further comprises:

a. connection establishment request reception means (CERRM1), adapted to receive a connection request from the subscriber data server (SDS) to establish the connection between the first user-terminal (UT1) connected to the first virtual private network and the second user-terminal (UT2) connected to the second virtual private network via the respective network access server (NAS1) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12); and

b. connection establishment request sending means (CERSM2), coupled with an input to an output of the connection establishment requesting reception means (CERRM1) and adapted to notify the second user-terminal (UT2) about an incoming call from the first user-terminal (UT1) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

23. Concerning claim 8, Alonso does not teach a Network Access Server (NAS2), for enabling a connection between a first user-terminal (UT1) and a second user-terminal (UT2) over a network such as the internet, the network containing a plurality of user terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the network access server (NAS2) comprises:

- a. connection establishment request reception means (CERRM4), adapted to receive a connection request from the first user-terminal (UT1) to establish the connection between the first user-terminal (UT1) connected to the first virtual private network and the second user-terminal (UT2) connected to the second virtual private network; and

- b. connection establishment request sending means (CERSM4), coupled with an input to an output of the connection establishment requesting reception means (CERRM4) and adapted to notify the subscriber data server (SDS) about an incoming call from the first user-terminal (UT1).

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24. Chen teaches a Network Access Server (NAS2), for enabling a connection between a first user-terminal (UT1) and a second user-terminal (UT2) over a network such as the internet, the network containing a plurality of user terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the network access server (NAS2) comprises:

a. connection establishment request reception means (CERRM4), adapted to receive a connection request from the first user-terminal (UT1) to establish the connection between the first user-terminal (UT1) connected to the first virtual private network and the second user-terminal (UT2) connected to the second virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12); and

b. connection establishment request sending means (CERSM4), coupled with an input to an output of the connection establishment requesting reception means (CERRM4) and adapted to notify the subscriber data server (SDS) about an incoming call from the first user-terminal (UT1) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement

the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

25. With regards to claim 9, Alonso does not teach that the Network access server further comprises:

a. connection establishment request reception means (CERRM2), adapted to receive a connection request from the first user-terminal (UT1) to establish the connection between the first user-terminal (UT1) connected to the first virtual private network and the second user-terminal (UT2) connected to the second virtual private network; and

b. connection establishment request sending means (CERSM3), coupled with an input to an output of the connection establishment requesting reception means (CERRM2) and adapted to notify the subscriber data server (SDS) about an incoming call from the first user-terminal (UT1).

26. Chen teaches that the Network access server further comprises:

a. connection establishment request reception means (CERRM2), adapted to receive a connection request from the first user-terminal (UT1) to establish the connection between the first user-terminal (UT1) connected to the first virtual private network and the second user-terminal (UT2) connected to the second virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12); and

b. connection establishment request sending means (CERSM3), coupled with an input to an output of the connection establishment requesting reception means (CERRM2) and adapted to

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notify the subscriber data server (SDS) about an incoming call from the first user-terminal (UT1) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent. It would have been obvious to one of ordinary skill in the art at the time the invention was made to duplicate the aforementioned parts providing multiple access to a plurality of users. See *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

27. As per claim 10, Alonso teaches a Subscriber Data Server (SDS), for enabling a connection of a first user-terminal (UT1) to a second user-terminal (UT2) over a network such as the internet, the network containing a plurality of user-terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3) and the subscriber data server (SDS) being coupled to each network access server of the plurality of network access servers (NAS1, NAS2, NAS3), the subscriber data server comprises:

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b. user-terminal connect notification updating means (UTCNUM) coupled with an input to an output of the user-terminal connect notification reception means (UTCNRM) and adapted to update a database of the subscriber data server (SDS) with the connection information (Figure 2 [blocks 202, 204]; column 7, lines 16-59).

28. Alonso does not teach:

a. user-terminal connect notification reception means (UTCNRM), adapted to receive the connection information at connection of the second user-terminal (UT2) to the respective network access server (NAS1) and at switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network;

c. connection establishment request reception means (CERRM), adapted to receive a connection request from the first user-terminal (UT1) to establish a connection between the first user-terminal (UT1) connected to a first virtual private network and the second user-terminal (UT2) connected to the second virtual private network;

d. connection information searching means (RISM), coupled with an input to an output of the connection establishment request reception means (CERRM) and adapted to search in the database of the subscriber data server (SDS) for connection information of the second user-terminal (UT2); and

e. connection establishment request sending means (CERSM1), coupled with an input to an output of the connection information searching means (RISM) and adapted to notify the second user-terminal (UT2) about an incoming call from the first user-terminal (UT1).

29. Chen teaches:

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a. user-terminal connect notification reception means (UTCNRM), adapted to receive the connection information at connection of the second user-terminal (UT2) to the respective network access server (NAS1) and at switch-over of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network (Figures 1A, 1B, 2 [blocks 20, 36, 37], 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49);

c. connection establishment request reception means (CERRM), adapted to receive a connection request from the first user-terminal (UT1) to establish a connection between the first user-terminal (UT1) connected to a first virtual private network and the second user-terminal (UT2) connected to the second virtual private network (Figures 1A, 1B, 2 [blocks 20, 36, 37], 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49);

d. connection information searching means (RISM), coupled with an input to an output of the connection establishment request reception means (CERRM) and adapted to search in the database of the subscriber data server (SDS) for connection information of the second user-terminal (UT2) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49); and

e. connection establishment request sending means (CERSM1), coupled with an input to an output of the connection information searching means (RISM) and adapted to notify the second user-terminal (UT2) about an incoming call from the first user-terminal (UT1) (Figures 3

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[blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines 23-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

30. With regards to claim 11, Alonso does not teach a second user-terminal (UT2), for inclusion in a network such as the internet containing a plurality of such user-terminals and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the second user-terminal (UT2) comprises the following means for enabling a connection between a first user-terminal (UT1) and itself comprising:

- a. connection establishment request reception means (CERRM3), adapted to receive a connection request from the first user-terminal (UT1) via its respective network access server (NAS2) to establish a connection to the second user-terminal (UT2);

b. incoming call handling means (ICHM), coupled with an input to an output of the connection establishment request reception means (CERRM3) and adapted to handle the connection request from the first user-terminal (UT1); and

c. switch requesting means (SRM), coupled with an input to an output of the incoming call handling means (ICHM) and adapted to request the respective network access server (NAS1) to switch the connection of the second user-terminal (UT2) from a second virtual private network to a first virtual private network.

31. Chen teaches a second user-terminal (UT2), for inclusion in a network such as the internet containing a plurality of such user-terminals and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the second user-terminal (UT2) comprises the following means for enabling a connection between a first user-terminal (UT1) and itself comprising:

a. connection establishment request reception means (CERRM3), adapted to receive a connection request from the first user-terminal (UT1) via its respective network access server (NAS2) to establish a connection to the second user-terminal (UT2) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12);

b. incoming call handling means (ICHM), coupled with an input to an output of the connection establishment request reception means (CERRM3) and adapted to handle the connection request from the first user-terminal (UT1) (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37, 43], 5 [blocks 20, 36, 37, 43], 6 [blocks 20, 36, 37, 45, 62, 63], 7; column 9, lines 10-31; column 9, line 60 to column 10, line 12); and

c. switch requesting means (SRM), coupled with an input to an output of the incoming call handling means (ICHM) and adapted to request the respective network access server (NAS1) to switch the connection of the second user-terminal (UT2) from a second virtual private network to a first virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 8, lines 43-67; column 11, lines 23-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent. It would have been obvious to one of ordinary skill in the art at the time the invention was made to duplicate the aforementioned parts providing multiple access to a plurality of users. See *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

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32. With regards to claim 12, Alonso teaches a software module for running on a processing system for inclusion in a Subscriber Data Server (SDS) and for enabling a connection of a first user-terminal (UT1) to a second user-terminal (UT2) over a network such as the internet, the network containing a plurality of user-terminals (UT1, UT2) and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3) and the subscriber data server (SDS) being coupled to each network access server of the plurality of network access servers (NAS1, NAS2, NAS3), the software module comprises:

b. user-terminal connect notification updating sub-module, cooperating with the user-terminal connect notification reception sub-module and adapted to update a database of the subscriber data server (SDS) with the connection information (Figures 1 [blocks 106, 102, 104], 2 [blocks 106, 102, 104, 202, 204], 3 [blocks 300, 302, 304]; column 2, line 62 to column 3, line 10; column 6, lines 52-61; column 7, lines 16-59; column 8, line 65 to column 9, line 23);

c. connection establishment request reception sub-module, adapted to receive a connection request from the first user-terminal (UT1) to establish a connection between the first user-terminal (UT1) connected to a first virtual private network and the second user-terminal (UT2) connected to the second virtual private network (Figures 1 [blocks 106, 102, 104], 2 [blocks 106, 102, 104, 202, 204], 3 [blocks 300, 302, 304]; column 2, line 62 to column 3, line 10; column 6, lines 52-61; column 7, lines 16-59; column 8, line 65 to column 9, line 23);

d. connection information searching sub-module, co-operating the connection establishment request reception sub-module and adapted to search in the database of the subscriber data server (SDS) for connection information of the second user-terminal (UT2) (Figures 1 [blocks 106, 102, 104], 2 [blocks 106, 102, 104, 202, 204], 3 [blocks 300, 302, 304]; column 2, line 62 to column 3, line 10; column 6, lines 52-61; column 7, lines 16-59; column 8, line 65 to column 9, line 23); and

e. connection establishment request sending sub-module, cooperating with the connection information searching sub-module and adapted to notify the second user-terminal (UT2) about an incoming call from the first user-terminal (UT1) (Figures 1 [blocks 116], 2 [blocks 104, 116, 202, 205], 3 [block 300]; column 8, line 65 to column 9, line 32).

33. Alonso does not teach:

a. user-terminal connect notification reception sub-module, adapted to receive the connection information at connection of the second users terminal (UT2) to the respective network access server (NAS1) and at switchover of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network.

34. Chen teaches:

a. user-terminal connect notification reception sub-module, adapted to receive the connection information at connection of the second users terminal (UT2) to the respective network access server (NAS1) and at switchover of the connection of the second user-terminal (UT2) from the second virtual private network to the first virtual private network (Figures 1A, 1B, 2 [blocks 20, 36, 37], 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 6, lines 29-34; column 8, lines 43-67; column 11, lines

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23-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

35. With regards to claim 13, Alonso teaches a software module for running on a processing system for inclusion in a second user-terminal (UT2) and for inclusion in a network such as the internet containing a plurality of such user-terminals and a plurality of network access servers (NAS1, NAS2, NAS3) each of the plurality of user-terminals (UT1, UT2) being coupled to a respective network access server of the plurality of network access servers (NAS1, NAS2, NAS3), characterized in that the software module comprises the following software sub-modules for enabling a connection between a first user-terminal (UT1) and itself comprising:

a. connection establishment request reception sub-module, adapted to receive a connection request from the first user-terminal (UT1) via its respective network access server (NAS2) to establish a connection to the second user-terminal (UT2) (Figures 1 [blocks 106, 102, 104], 2 [blocks 106, 102, 104, 202, 204], 3 [blocks 300, 302, 304]; column 2, line 62 to column 3, line 10; column 6, lines 52-61; column 7, lines 16-59; column 8, line 65 to column 9, line 23);

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b. incoming call handling sub-module, co-operating with the connection establishment request reception sub-module and adapted to handle the connection request from the first user-terminal (UT1) (Figures 1 [blocks 116], 2 [blocks 104, 116, 202, 205], 3 [block 300]; column 8, line 65 to column 9, line 32).

36. Alonso does not teach:

c. switch requesting sub-module, co-operating with the incoming call handling sub-module and adapted to request the respective network access server (NAS1) to switch the connection of the second user-terminal (UT2) from a second virtual private network to a first virtual private network.

37. Chen teaches:

c. switch requesting sub-module, co-operating with the incoming call handling sub-module and adapted to request the respective network access server (NAS1) to switch the connection of the second user-terminal (UT2) from a second virtual private network to a first virtual private network (Figures 3 [blocks 20, 36, 37], 4 [blocks 20, 36, 37], 5 [blocks 20, 36, 37], 6 [blocks 20, 36, 37, 45, 62, 63]; column 8, lines 43-67; column 11, lines 23-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the virtual private network controls of Chen with the system of Alonso, because it would enable a system in which users could establish a secure network connection through different Internet service providers. Alonso discusses accessing different types of secure networks in column 4, thus the combination with Chen is proper because it would complement the Alonso system by allowing more secure connections. Chen also teaches a similar server as to the network access server in the Alonso patent.

Claim Objections

38. Claims 1 through 9, 11, and 13 are objected to because of the following informalities: there are numerous spelling mistakes, i.e. characterized instead of characterised. Appropriate correction is required.

Conclusion

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

40. The following patents are cited to further show the state of the art with respect to terminal-to-terminal connections, such as:

United States Patent No. 6,381,631 to van Hoff, which is cited to show a method and apparatus for controlling a computer system.

United States Patent No. 6,081,900 to Subramaniam et al., which is cited to show a method to access a secure intranet.

United States Patent No. 6,470,453 to Vilhuber, which is cited to show to validate connections in a network.

United States Patent No. 6,298,383 to Gutman et al., which is cited to show a how to integrate authentication, authorization, and accounting service into a proxy service.

United States Patent No. 6,539,482 to Blanco et al., which is cited to show how to authenticate to a network.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704.

The examiner can normally be reached on Monday thru Thursday 7-5.


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42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7240 for regular communications and (703) 746-7239 for After Final communications.

43. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Christian LaForgia
Patent Examiner
Art Unit 2155

clf
April 23, 2003


AYAZ SHEIKH
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